UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

31013 7590 03/15/2010

KRAMER LEVIN NAFTALIS & FRANKEL LLP
INTELLECTUAL PROPERTY DEPARTMENT

EXAMINER
BIANCHI, KRISTIN A

ART UNIT PAPER NUMBER
1606

DATE MAILED: 03/15/2010

INTELLECTUAL PROPERTY DEPARTMENT 1177 AVENUE OF THE AMERICAS NEW YORK, NY 10036

 APPELCATION NO.
 FIELNO DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/561,153
 04/05/2006
 Robert Jordan
 0/56440-1402
 9124

TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS, AND METHODS FOR TREATMENT AND PREVENTION OF ORTHOPOXVIRUS INFECTIONS AND ASSOCIATED DISEASES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/15/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This f appropriate. All further c indicated unless correcter maintenance fee notificati	form should be used f orrespondence includin d below or directed oth ons.	or tran ig the l ierwise	smitting the ISSU Patent, advance or in Block 1, by (a	TE FEE and PUBLICA ders and notification of the specifying a new con-	TION FEE (if requ f maintenance fees v respondence address	ired). l will be ; and/o	Blocks 1 through 5 st mailed to the current or (b) indicating a seps	nould be completed where correspondence address as trate "FEE ADDRESS" for
	NCE ADDRESS (Note: Use Blo		any change of address)	Fo	ee(s) Transmittal. Th apers. Each addition:	is certi il paper	ficate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
KRAMER LEV INTELLECTUAL 1177 AVENUE (	7590 03/15 IN NAFTALIS & L PROPERTY DE OF THE AMERICA	k FR.		I Si ac tr	bereby certify that th	is Feet	e of Mailing or Trans: (s) Transmittal is being fficient postage for firs ISSUE FEE address (1) 273-2885, on the d	mission g deposited with the United tt class mail in an envelope above, or being facsimile ate indicated below.
NEW YORK, NY	( 10036							(Depositor's name)
				L				(Signature)
				L				(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTC	ORNEY DOCKET NO.	CONFIRMATION NO.
10/561,153	04/05/2006			Robert Jordan		056440-1402 912		9124
TITLE OF INVENTION INFECTIONS AND ASSO		MPOS:	ITIONS, AND M	METHODS FOR TREA	ATMENT AND PR	EVEN.	TION OF ORTHOPO	XVIRUS
APPLN. TYPE	SMALL ENTITY	ISS	SUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	06/15/2010
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	7			
BIANCHI, K	RISTIN A		I626	514-410000	_			
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required.  3. ASSIGNEE NAME AN	ndence address (or Cha 7122) attached. cation (or "Fee Address" c or more recent) attach TO RESIDENCE DATA sss an assignce is identi in 37 CFR 3.11. Comp	nge of 6 ' Indica ed. Use	Correspondence  tion form of a Customer  E PRINTED ON 1		to 3 registered pater stively, igle firm (having as a r agent) and the nan tiorneys or agents. If the printed, type) patent. If an assign assignment.	a memb nes of u no nan	per a 2	ocument has been filed for
Please check the appropria	ate assignee category or	catego	ries (will not be pr	inted on the patent):	☐ Individual ☐ C	orporat	ion or other private gro	oup entity Government
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies				o. Payment of Fee(s): (PA  A check is enclosed  Payment by credit of  The Director is here overpayment, to De	L ard. Form PTO-203	B is atta	ached. required fee(s), any de	
	SMALL ENTITY statu	s. See 3	37 CFR 1.27.	b. Applicant is no le				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requeeords of the United Sta	iired) v tes Pate	rill not be accepted int and Trademark	I from anyone other that Office.	n the applicant; a reg	istered	attorney or agent; or th	e assignee or other party in
Authorized Signature _					Date			
Typed or printed name					Registration !	No		
This collection of informa an application. Confidenti submitting the completed this form and/or suggestio Box 1450, Alexandria, Vir Alexandria, Virginia 2231	tion is required by 37 C ality is governed by 35 application form to the ns for reducing this bur rginia 22313-1450. DC 3-1450.	FR 1.3 U.S.C. USPT den, sh	11. The informatic 122 and 37 CFR O. Time will vary ould be sent to the SEND FEES OR O	on is required to obtain on 1.14. This collection is depending upon the incommendation off COMPLETED FORMS	r retain a benefit by estimated to take 12 lividual case. Any co icer, U.S. Patent and TO THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tir nark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/561,153	04/05/2006	Robert Jordan	056440-1402	9124		
31013	7590 03/15/2010	03/15/2010		EXAMINER		
KRAMER LEV	IN NAFTALIS & FR	BJANCHI, KRISTIN A				
	L PROPERTY DEPAR	ART UNIT	PAPER NUMBER			
1177 AVENUE ( NEW YORK, NY	OF THE AMERICAS	1626				

DATE MAILED: 03/15/2010

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 650 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 650 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)			
10/561,153	JORDAN ET AL.			
Examiner	Art Unit			
KRISTIN RIANCHI	1626			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 01/11/2010.
- The allowed claim(s) is/are 1-15 and 20-22.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. 

      Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) I hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 12/16/2009
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other \_\_\_\_

Application/Control Number: 10/561,153 Page 2

Art Unit: 1626

#### DETAILED ACTION

Claims 1-15 and 20-22 are pending in the instant application. Claims 16-19 and 23-45 have been cancelled by way of examiner's amendment. Claims 1-15 and 20-22 are allowed.

#### Information Disclosure Statement

The information disclosure statement filed on December 16, 2009 has been considered and a signed copy of form 1449 is enclosed herewith.

#### Response to Arguments/Remarks

The arguments/remarks filed on January 11, 2010 have been fully considered. In regards to the 35 U.S.C. 112, first paragraph, rejection of claims 1, 2, 4-15, and 20-22, Applicant argues (and presents Exhibits 1-5) that the state of the art is replete with examples supporting the feasibility of the CPE assay for testing and identification of novel selective inhibitors of orthopoxviral infections which demonstrate potency and selectivity in vitro and further anti-viral efficacy in vivo. This argument (along with Exhibits 1-5) has been found to be fully persuasive and the 35 U.S.C. 112, first paragraph, rejection has been withdrawn.

#### Flection/Restrictions

It is noted that upon further consideration, Groups II and III have been rejoined with Group I. Therefore, the subject matter of claims 1-15 and 20-22 has been searched and examined in its entirety.

#### EXAMINER'S AMENDMENT

Art Unit: 1626

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The claims have been amended as follows: claims 16-19 and 23-45 have been cancelled.

#### REASONS FOR ALLOWANCE

The methods of the instant claims are novel and non-obvious over the prior art because of the structural limitations of the compounds which are used in the methods (i.e., an amide group is bonded directly to the nitrogen atom of the polycyclic ring structure). The closest prior art is US Patent No. 4,061,763 which discloses compounds of Structure I (column 1) which have pharmaceutical utility (i.e., abstract). The compounds disclosed in US Patent No. 4,061,763 do not fall within the scope of the compounds used in the instant claims nor are they obvious variants. It is noted that the method of using the compounds disclosed in US Patent No. 4,061,763 (i.e., claim 4) also does not fall within the scope of the methods of the instant claims nor is it an obvious variant.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Art Unit: 1626

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTIN BIANCHI whose telephone number is (571)270-5232. The examiner can normally be reached on Mon-Fri 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamal A Saeed/ Primary Examiner, Art Unit 1626 Kristin Bianchi Examiner Art Unit 1626

\*\*\*